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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|----------------------|---------------------|------------------|
| 10/004,768 | 12/04/2001 | Yungrwei Chen | 00-08 | 8455 |
| 30699 | 7590 | 03/24/2005 | EXAMINER | |
| DAYCO PRODUCTS, LLC 1 PRESTIGE PLACE MIAMISBURG, OH 45342 | | | HOOK, JAMES F | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 3754 | |

DATE MAILED: 03/24/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

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|------------------------------|--------------------------------------|------------------------------------|--|
| Office Action Summary | Application No. 10/004,768 | Applicant(s) CHEN ET AL. | |
| | Examiner James F. Hook | Art Unit 3754 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 December 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1-8 and 10-18 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 6-16 of U.S. Patent No. 6,338,363. Although the conflicting claims are not identical, they are not patentably distinct from each other because the language set forth in the '363 patent encompasses that set forth in the instant application.

It is noted that applicant attempted to file a terminal disclaimer with the previous amendment filed on December 20, 2004, however, applicant submitted the wrong disclaimer form for overcoming an obviousness type double patenting rejection, where the proper terminal disclaimer form has a blank for filing in the patent number of the patent term being disclaimed. Upon filing of a proper terminal disclaimer, the above rejection will be addressed and handled accordingly.

Claim Rejections - 35 USC § 102

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The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 19 and 20 are rejected under 35 U.S.C. 102(b) as being anticipated by Cooper. The patent to Cooper discloses the recited energy attenuation apparatus for a system conveying liquid comprising a liquid conveying means formed of three chambers 22, 22', and the center chamber that is marked as 28, chambers 22 and 22' are seen to not contain a tube and therefore are two chambers that do not contain a tube, and the middle chamber is provided with a tube 30 which can have an open end only or as seen in figure 7 can have holes 32 in the wall of the tube and where the tube end is spaced from the end of the chamber, where such can be made with one, two, or three chambers.

Claims 1-3, 6, 7, 13-15, 19, and 20 are rejected under 35 U.S.C. 102(b) as being anticipated by van Ruiten (981). The patent to van Ruiten discloses the recited energy attenuation apparatus for a system conveying liquid comprising a liquid conveying means 20' (see figure 3) which is formed having three chambers formed in conduits 21' at each end of a conduit 61, restrictor 24' is provided in the system, a first tube 36', a second tube 45' are provided in two of the conduits on either side of a chamber formed in conduit 61 which is not provided with a tube, where the tubes have opened ends for transmitting flow into the chambers. Further, as seen in the figure conduit 29' can also be considered to provide a chamber therein containing no tubes and is in series with the

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chamber containing a tube 55A and a second chamber formed in conduit 61 which also has no tube therein.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 3, 6-10, and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cooper. Cooper discloses all of the recited structure above and it is noted that the springs provided in the first and last chambers are meant to provide attenuation to energy as well but are not tubes. The patent to Cooper discloses all of the recited structure with the exception of providing two tubes in two of the chambers, and disclosing a specific distance the tube end is from the end of the chamber. The fact that Cooper discloses that one can provide an attenuation means in the first and third chambers, and the fact that the tube is also a form of attenuation, it is considered obvious that one skilled in the art could substitute a tube type attenuator for one of the spring attenuators in either the first or last chamber as desired to further control the attenuation to meet the needs of the user for a particular application as such would only require routine skill in the art and routine experimentation to arrive at optimum values, such would also be true for using routine experimentation to arrive at a optimum distance the tube end should be from the end of the chamber to achieve the best results in attenuation.

Claims 2, 4, 5, 11, 12, 17, and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cooper in view of van Ruiten(981). The patent to Cooper discloses all of the recited structure as set forth above including connectors 25 that separate the chambers with the exception of forming the connectors as restrictors. The patent to van Ruiten discloses the structure set forth above including using a restrictor type connector to separate chambers. It would have been obvious to one skilled in the art to modify the connectors in Cooper to be formed with a restriction as suggested by van Ruiten to further attenuate and improve flow characteristics and attenuation characteristics of the system.

Response to Arguments

Applicant's arguments filed December 20, 2004 have been fully considered but they are not persuasive. With respect to the arguments directed toward van Ruiten (981) the specific limitations of the claims do not require structure other than chambers, and the conduit 61 would contain a chamber therein that meets the current claim language which places no limitations on what or how the chamber is formed. There is no language in the claims which demands the structure be a single unitary structure, so considering three elements to make up the equivalent of applicants "liquid conveying means" is considered appropriate when the structure set forth in van Ruiten of the three tubes is a liquid conveying means. The tuning cable of van Ruiten likewise meets the claim language which does not set forth any specific structure of a tube that is not met by van Ruiten's tuning cable which includes at least one peripheral aperture formed by the slot between windings of the cable and/or the opening in the end of the tuning cable

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which also would meet the "at least one aperture in the free end". It is immaterial if it would act differently when such at least meets the broadest interpretation of the claim language, where a long spiral opening is at least one aperture in the side wall of the tubular tuning cable. With respect to Cooper, the applicant is attempting to define the term "no tubes" by the definition set forth in the specification where such recites that the term no tubes can be considered "empty", however, the specification fails to further disclose what is meant by empty. Based upon the drawings which clearly show structure extending into the chambers containing no tubes, and the specification does not disclose that empty means totally devoid of anything, then it is not persuasive that the term empty means anything other than empty of tubes which is what the specification suggests. Further if the term empty were considered to be empty of all things, then applicant's drawings would be in error and there would be no fluid provided in the chamber either, which would essentially make the apparatus useless. The fact that the specification lists one example of the meaning of "no tubes" suggests that other interpretations exist, and the provided example is not limiting to the definition. The only reading of the term empty based on the specification and drawings is empty of tubes which is how the examiner was interpreting this limitation. Clearly Cooper's springs are not tubes and the chambers are empty of tubes, where the space inside of the springs are empty as well. It is considered that with respect to the teachings of Cooper that springs and tubes are used for attenuation, substituting one for the other only requires routine skill in the art as set forth above. The examiner acknowledges that tubes and springs are different, hence a spring is not a tube, however, that does not change the

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fact that Cooper teaches both as used for attenuation purposes and therefore that such are interchangeable. With respect to the combination of Cooper, it is considered that the examiner is not suggesting that Cooper be modified to remove the springs, van Ruiten only shows other parts being provided, not removing springs in Cooper, and the language of the claims requiring no tubes or empty of tubes is considered met by Cooper without modification where springs are not considered a tube as tube is normally defined even though the spring of Cooper is another type of attenuation device. The fact that these two attenuation devices accomplish different amounts of attenuation does not suggest that they are not equivalent attenuation means, and one skilled in the art would find it obvious to use either interchangeably.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

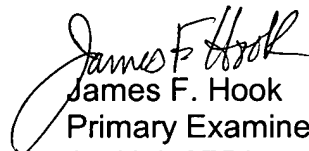
A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to James F. Hook whose telephone number is (571) 272-4903. The examiner can normally be reached on Monday to Wednesday, work at home Thursdays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Mar can be reached on (571) 272-4906. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


James F. Hook
Primary Examiner
Art Unit 3754

JFH